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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/166,814	10/06/1998	JOHN PAUL RUSSELL		9555

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EXAMINER
TRAN, PHUC H

ART UNIT	PAPER NUMBER
2666	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No.	Applicant(s)
	09/166,814	RUSSELL ET AL.
	Examiner	Art Unit
	PHUC H TRAN	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2002* .

2a)☒ This action is **FINAL**.　　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10,12-20,22-32 and 35* is/are rejected.

7)☒ Claim(s) *9,11,21,33,34 and 36* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)　　　　4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)　　5)☐ Notice of Informal Patent Application (PTO-152)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .　　6)☐ Other: .

DETAILED ACTION

Claim Objections

1.   Claims 1, 13, 14, 22, 29 & 33 are objected to because of the following

informalities: "the time" is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-3, 5-8, 10, 12-14, 16-20, 22, 24-26, 28-32 and 35 are rejected under 35

U.S.C. 103(a) as being unpatentable over Huang (U.S. Patent No. 6266345 B1) in view

of Stiliadis et al. (U.S. Patent No. 6134217).

- With respect to claims 1-2, 13, & 32, Huang teaches a method of transporting

data over a synchronous digital network (e.g. Fig. 1 shows the system 110 transmits data

over 150 to system 120). The method comprises the steps of: generating in parallel a

plurality of synchronous virtual containers (e.g. Fig. 4 shows parallel VCs are transmitted

in SDH 150), each at a lower bit rate than a bit rate of the data, each the virtual container

having a payload section (col. 4, lines 61-67); associating the plurality of virtual

containers with each other by means of assigning association data describing the

association into the plurality of virtual containers (col. 5, lines 41-44); inputting the

transported data into the payloads of the plurality of virtual containers (col. 5, lines 27-

34); and outputting the plurality of associated virtual containers onto a synchronous

digital network (col. 2, lines 42-45). Huang fails to teach indicating for each virtual

container a time at which each virtual container was generated relative to other associated

virtual containers. Stiliadis teaches a timestamp assigning by the switch for associated

with each packet in the system for calculating on arrival of each packet and controlling

the delay (e.g. Fig. 7, bridge paragraph between col. 28 and 29). Therefore, it would

have been obvious to a person of ordinary skill in the art at the time of the invention was

made to implement the method of assigning the timestamp for each data packet to

calculating on the arrival of each packet and control the end to end delay.

- With respect to claim 3, Huang also teaches wherein the step of associating the

plurality of virtual containers with each other comprises inserting the association data

into a plurality of payloads of the plurality of virtual containers, the association data

permitting recovery of the original association at a destination end (see bridge paragraph

in col. 2 & 3).

- With respect to claims 5-8, 10, 12, 16-20, 30-31, & 35, Huang discloses wherein

the plurality of virtual containers are generated as a plurality of streams of virtual

containers and the step of associating the plurality of virtual containers with each other

comprises associating a plurality of the streams of virtual containers and data with each

other (col. 6, lines 31-51).

- With respect to claim 14, Huang teaches a method of recovering data from a

plurality of synchronous virtual containers (e.g. Fig. 5 shows the demapping unit 121).

The method comprises the steps of: receiving the plurality of virtual containers (e.g. col.

6, lines 62-64); identifying an association data from the plurality of virtual containers, the

association data indicating an association between individual ones of the plurality of

virtual containers (col. 7, lines 17-22); reading data bytes from each payload of the

plurality of associated virtual containers (col. 7, lines 15-16); and re-assembling the data

from the plurality of read payload data bytes (col. 7, lines 23-26). Huang fails to teach

indicating for each virtual container a time at which each virtual container was generated

relative to other associated virtual containers. Stiliadis teaches a timestamp assigning by

the switch for associated with each packet in the system for calculating on arrival of each

packet and controlling the delay (e.g. Fig. 7, bridge paragraph between col. 28 and 29).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

of the invention was made to implement the method of assigning the timestamp for each

data packet to calculating on the arrival of each packet and control the end to end delay.

- With respect to claims 22, 25-26, & 28-29, Huang teaches a method of

recovering a data block carried in a plurality of payloads of a plurality of associated

synchronous digital hierarchy virtual containers (e.g. Fig. 5 shows the demapping unit

121). The method comprises steps of: receiving a plurality of streams of the plurality of

associated virtual containers (col. 7, lines 7-9); for each the received virtual container

stream allocating a corresponding respective memory area for storage of data payloads of

virtual containers of the stream (e.g. data storage in memory of system 120); storing the

plurality of virtual container payloads in the corresponding allocated memory areas and

reading individual bytes of the plurality of stored virtual container data payloads in

sequence to reconstruct the data block (col. 7, lines 27-43). Huang fails to teach

indicating for each virtual container a time at which each virtual container was generated

relative to other associated virtual containers. Stiliadis teaches a timestamp assigning by

the switch for associated with each packet in the system for calculating on arrival of each

packet and controlling the delay (e.g. Fig. 7, bridge paragraph between col. 28 and 29). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the method of assigning the timestamp for each data packet to calculating on the arrival of each packet and control the end to end delay.

- With respect to claim 24, Huang discloses further comprising the step of assembling the data frame from the parallel read data (e.g. col. 5, lines 17-20).

4.   Claims 4, 15, 23 & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (U.S. Patent No. 6266345 B1) and Stiliadis et al. (U.S. Patent No. 6134217) in further view of Oksanen et al. (U.S. Patent No. 5666351).

- With respect to claims 4 & 15, Huang discloses all the aspect of the claimed invention as set forth above but fails to teach wherein the step of inputting the transported data into the plurality of virtual containers comprises byte interleaving bytes of a frame of the transported data between the pluralities of payloads. Oksanen teaches inputting data into the virtual containers by interleaving (col. 2, lines 41-43). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the scheme of interleaving data into Virtual Container to transmit in SDH network for mapping from lower-level unit to higher-level frame.

- With respect to claims 23 & 27, Huang also fails to teaches wherein the data frame is distributed between the plurality of virtual containers and the step of: for each the memory area, setting a read pointer to a memory location of the memory area. Oksanen teaches setting a pointer in the virtual container for inputting data frame into the memory area (col. 3, lines 16-22). Therefore, it would have been obvious to a person of

ordinary skill in the art at the time of the invention was made to implement the pointer for

inputting data into associated memory location of the memory area and data information.

Allowable Subject Matter

5.   Claims 9, 11,21,33-34, 36 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Response to Arguments

6.   Applicant's arguments with respect to claims 1-8, 10, 12-20, 22-32, & 35 have

been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure.

- Dollin et al. (U.S. Patent No. 6112236) discloses method and apparatus for
  making quality of service measurements on a connection across a network.

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-
7471. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, RAO SEEMA can be reached on (703) 308-5463. The fax phone numbers for
the organization where this application or proceeding is assigned are (703) 872-9314 for
regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is (703) 872-
9314.

Phuc Tran
Assistant Examiner
Art Unit 2664
P.t
January 21, 2003